

## SCIENTIFIC NOTE

**The Occurrence of a Second Genus of Spongilla-Fly (*Sisyra vicaria* (Walker)) at Clear Lake, Lake County, California.**—A revision of the Sisyridae (Neuroptera) by Parfin and Gurney (Proc. USNM No. 3360, Vol. 105:421–529) in 1956 reported *Climacia californica* Chandler to be the only species of spongilla-fly in California. The distribution of this species was limited to Oregon and the single locality of Clear Lake in California.

On May 18, 1968 at Clear Lake sisyrid adults, pupae, prepupae and larvae were collected at the type locality of *Climacia californica* on an aquatic entomology field trip. A recent close examination of the material showed two species to be present. Collections of adults and cocoons from under a wharf during the morning provided 23 ♂ and 13 ♀ adults of *Climacia californica* and 3 ♀ and 2 pupae of *Sisyra vicaria* (Walker). Ten cocoons were collected which contained pupae, prepupae, or pupal exuviae. Seven of 10 cocoons had an inner layer and an outer layer of closely woven and irregularly criss-crossed fibers. Three cocoons had the outer layer of loosely woven fibers hexagonal in pattern. Five of the cocoons with criss-crossed fibers had pupae or pupal exuviae identified as belonging to the genus *Sisyra* by their maxillary palpi and 10th tergite. All 3 of the cocoons with the hexagonal pattern had pupae or their exuviae that keyed to *Climacia*. Chandler (In Usinger 1956, Aquatic Insects of California, p. 236) reported the hexagonal pattern for the cocoon to be restricted to the genus *Climacia* and the criss-crossed construction to be typical for *Sisyra*. Parfin and Gurney listed *Sisyra fuscata* (Fabricius) as also producing a cocoon with a hexagonal net pattern at times. This was the only species of *Sisyra* known to show an exception to the criss-crossed pattern of cocoon construction. The wing venation of the 3 *Sisyra* adults from Clear Lake was typical of *S. vicaria*. Eight 3rd instar larvae were also collected on this date on sponges just below water ( $\frac{1}{2}$  to  $2\frac{1}{2}$  feet deep) on a rocky shoreline about  $\frac{1}{4}$  mile from the wharf. The larvae appeared to be *Climacia californica* but the identification was not positive. Parfin and Gurney reported the 3rd instar larvae of *C. californica* and *S. vicaria* to be very similar and difficult to separate.

On July 25, 1975 the same locality was again revisited. The underside of the wharf was closely examined but no adults were collected. Nine cocoons were removed from beneath the wharf, 6 with prepupae and 3 with pupal exuviae. The 3 pupal exuviae were identified as *Climacia* and all 9 cocoons had their outer covering of hexagonal netting, indicating the entire collection to be *Climacia californica*. Two weeks following the collection a species of Pteromalidae (*Sisyridivora* sp. ♂) emerged from one of the cocoons of *C. californica*. Reported parasitization by *Sisyridivora* is limited to the species *cavigena* on *Climacia aerolaris* (Hagen) in Ohio (Gahan, 1944. Ann. Ent. Soc. 44: 100–2). Sponges on the wharf piling and on small rocks below the wharf did not contain spongilla-fly larvae but the sponges were rather sparse in this area. The same rocky shoreline as in 1968 was inspected for 2 hours. Sponges were abundant but no larvae were found at depths from  $\frac{1}{2}$  to 4 feet.

Brown (1952, Amer. Midl. Nat. 47: 157) noted that sponges from comparatively cool clean Lake Erie yielded only larvae of *Climacia* while those from a warm, shallow, polluted pond in Ohio yielded only *Sisyra* larvae. Parfin and Gurney reported that Hungerford collected both *Sisyra* and *Climacia* larvae from two

lakes in Michigan. It seems unusual that a collection of 29 type specimens of *Climacia californica* in May of 1949 would not have also revealed *Sisyra vicaria* if it were present. However, the same species ratio as was found in 1968 would have only resulted in 2.4 adult specimens of *Sisyra* in 1949. It is more likely that it was missed in 1949 than the collection in 1968 representing a 300 mile extension of its distribution from Oregon. It is questionable that the species of host sponge would be the critical factor in the distribution of these species of spongilla-flies. Poirrer (1969, Amer. Mid. Nat. 81: 573-5) reported no apparent host specificity in Louisiana and Texas for several spongilla-flies including *Sisyra vicaria*, and *Climacia areolaris* (Hagen) which had 4 and 5 species respectively of host sponges, including 3 in common.—A. A. GRIGARICK, *Department of Entomology, University of California, Davis.*

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## NEW JOURNAL

ENTOMOLOGICA GERMANICA. A. W. Steffan, Editor, Petzower Strasse 34, D-1000 Berlin 39. Published quarterly, approximately 400 pp per volume. Initial issue, January 1975. DM 98.—per volume, DM 35.—per single issue.

This journal will publish original manuscripts from all non-applied fields of entomology. Classical areas (comparative morphology, phylogeny), as well as currently popular branches of research will be considered. Manuscripts need not be in German, but that will be the main publication language. Band 1, Heft 1 contains works dealing with functional morphology and fine structure of anal papillae of aquatic syrphid flies, the phylogenetics of Plecoptera, and a revision of a genus of ichneumonid wasps, as well as other articles.—*Editor.*

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## RECENT LITERATURE

CALIFORNIA WASPS OF THE SUBFAMILY PHILANTHINE (HYMENOPTERA: SPIECIDAE).

R. M. Bohart and E. E. Grissell. Bulletin of the California Insect Survey, 19: 1-92; 151 figs., 46 maps. 1975.

Treats the 6 genera and 65 species which occur in California. Species treatments include capsule summaries of biological information, as well as distribution maps and listings of California records. Figures comparing facial markings, abdominal color patterns, and especially the outline of the lower face and mandibles in *Philanthus* supplement the keys and other descriptive material.—*Editor.*